Office of Energy Efficiency and Renewable Energy U.S. Department of Energy

c/o Meeting Management Services 1201 New Jersey Ave. NW Washington, DC 20001



Program & Registration Information



The Office of Energy Efficiency and Renewable Energy, The U.S. Department of Energy and The Texas Industries of the Future



Energy-Efficient Process Technologies and Best Practices Chemical and Refining Industries March 17 - 19, 2003 Houston, Texas

TEXAS TECHNOLOGY 2003 SHOWCASE





Sponsors

American Institute of Chemical Engineers

Center for Energy and Environmental Resources at the University of Texas

Council of Industrial Boiler Owners

East Harris County
Manufacturers Association

Greater Houston Partnership

National Petrochemical & Refiners Association

South Texas Section of the American Institute of Chemical Engineers

State Energy Conservation
Office of the Texas
Comptroller of Public
Accounts

Texas A&M University
Industrial Assessment Center

Texas Chemical Council

Texas Commission on Environmental Quality

Texas Council on Environmental Technology

The Office of Energy Efficiency and Renewable Energy, The U.S. Department of Energy and Texas Industries of the Future would like to invite you to the

Texas Technology 2003 Showcase, to be held in Houston, Texas March 17 – 19, 2003 at the Radisson Astrodome

The process industries along the Texas Gulf Coast face an enormous challenge to remain globally competitive and meet state air quality standards for ozone. Chemical plants and refineries will be most heavily impacted. These drivers will not be limited to Texas in the future, as other states also adopt stricter rules for NOx emissions.

With this in mind, the Showcase will offer the latest in processing and combustion technologies, and best energy management practices that can result in improved environmental performance, increased energy efficiency and reduced costs at chemical plants and refineries.

Addressing these energy, environment and cost factors will be an important part of the strategy to keep your plant in business in the coming years!

What is the Texas Technology Showcase?

The Showcase will be a three-day event, combining **technical sessions**, **plenary addresses** by business, political and government leaders, **special forums** on selected topics, and **tours of Showcase plants**. Hear from industry leaders, technology experts, government agency staff and suppliers about the latest developments in the following:

♦ *NOx reduction*

♥ Plant optimization

♥ Combined heat and power

Sustainability

♥ VOC reduction

Separations and distillation

Pumps, motors and compression

Supply chain optimization

🦴 Survival strategies for small and medium sized plants

🦴 Resources for technology development, commercialization and deployment

Key industry and government leaders to address the Showcase attendees include:

David Garman, Assistant Secretary of the Office of Energy Efficiency and Renewable Energy, U.S. Department of Energy

Robert J. Huston, Chairman, Texas Commission on Environmental Quality **Jim Gallogly**, President & CEO, Chevron Phillips Chemical Company LP

Texas Technology Showcase



Energy-Efficient Process Technologies and Best Practices
Chemical and Refining Industries
March 17 - 19, 2003 Houston, Texas

What you can expect

- Learn how **leading companies** in energy efficiency and environmental performance are doing the job.
- Find out how to incorporate **best energy management practices** to reduce cost.
- See the **latest technologies** in action and talk to technology operators and vendors.
- Find out how to **build support for energy efficiency** in your organization, whether large or small.
- Find **new resources** for plant upgrades and technology development.
- Learn what is being done to meet emission reduction requirements.
- **Network** with industry, research and government leaders.
- Visit the **Exposition Hall** where over 65 experts will be exhibiting technologies and services for energy-efficient and environmental applications. If you are interested in becoming an exhibitor, please contact David McKennon at 202-624-1784 or go to *Become an Exhibitor* at www.showcasetexas.org.

Who Should Attend?

- Business Leaders
- Plant Managers
- Energy Managers
- Technology Experts
- Process/Utility Experts
- Equipment Suppliers
- Environmental Agency Staff
- Plant Utility and Environmental Engineers
- University/National Laboratory Researchers
- Local. State and Federal Government Leaders

Location Information

Radisson Astrodome 8686 Kirby Dr. Houston, Texas 77054 (713) 748-3221

Hotel is located across from the Astrodome/Six Flags Astrodome. Free parking for attendees.

Room Rates

Single: \$99/night Double: \$109/night Triple: \$119/night

Quad: \$129/night Suite: \$199/night

Be sure to mention the Texas Showcase to get the discounted rate.

Government: A limited number of rooms will be available at the prevailing government

rate.

Showcase Plants

Calpine Baytown Energy Center

Chevron Phillips Chemical Company LP Cedar Bayou Plant

The Dow Chemical Company

ExxonMobil

Merisol USA LLC

Rohm & Haas Texas Inc.
Deer Park Plant

Valero Energy Corporation Houston Refinery

TEXAS TECHNOLOGY 2003 SHOWCASE



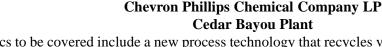






Baytown Energy Center

Topics include plant operations, natural gas-fired combined cycle technology and emissions information for the power plant and steam host.



Topics to be covered include a new process technology that recycles valuable components from vent streams in a polyolefin plant, integration of energy improvements into a NOx reduction project on ethylene furnaces, demonstration of steam system & energy management optimizer software, steam trap management program, and steam system improvements as a result of targeted assessments.

The Dow Chemical Company Presentation at the Radisson Astrodome

Topics to be covered include Dow's By-Product Synergy project, the utilization of the six sigma methodology to identify and implement energy-efficiency improvements, and NOx reduction projects.



Presentation at the Radisson Astrodome

ExxonMobil will present results from an ongoing process heater retrofit project reducing NOx emissions and improving fuel efficiency. The project utilizes burner technology developed jointly by ExxonMobil, DOE, Tiax, Callidus, and the Gas Technology Institute. ExxonMobil will also present results from other initiatives coupling environmental and energy efficiency improvements, such as ExxonMobil's use of combined heat and power and the company-wide Global Energy Management System.

Merisol USA LLC Presentation at the Radisson Astrodome

Merisol will present the results of a process heating targeted assessment and efforts to reduce energy usage and cut costs.

Rohm & Haas Texas Inc. Deer Park Plant

Rohm and Haas Inc.'s award winning energy-efficiency program will be presented. Topics include program goals, challenges and the significant combined benefits (financial, environmental and sustainability) obtainable from a successful energy program. Several projects ranging from steam leak management to a complex total site real-time energy optimization system will be covered. The importance of best practices and metrics utilization as well as potential benefits from new initiatives like pinch analysis will be addressed.

Valero Energy Corporation Houston Refinery

Topics include highlights from a plant wide energy assessment, a plant energy systems software model and several energy system targeted assessments.













Texas Technology Showcase



Energy-Efficient Process Technologies and Best Practices
Chemical and Refining Industries
March 17 - 19, 2003 Houston, Texas

| SCHEDULE AT A GLANCE | | | | | | | | |
|----------------------|--|-----------------------|---|-----------------------|-----------------------------|--------------------------------------|--|--|
| | MONDAY | | TUESDAY | | WEDNESDAY | | | |
| | MA] | RCH 17 | MARCH 18 | | MARCH 19 | | | |
| 8:00 am | | | | | | | | |
| 9:00 am | | | 9am - Morning Plenary Robert Huston - Chairman, TCEQ & Elected State Official | | 8am - 2pm Plant Tours | 8am - 11:00am Sessions D1 - D5 | | |
| 10:00 am | | | 10:20am - 12pm Sessions | | | D1 - D3 | | |
| 11:00 am | | | B1 - B6 | | | | | |
| 12:00 pm | 12pm - Opening Lunch Plenary Address | | 12pm - Lunch Plenary Address | | | 11:15 am - Closing Plenary | | |
| 1:00 pm | David Garman - Assistant Secretary, Energy Efficiency and Renewable Energy, U.S. DOE | | Jim Gallogly - President & CEO Chevron Phillips Chemical Company, LP | | | | | |
| 2:00 pm | Renewable E | mergy, c.s. Dol | Li | | | | | |
| 3:00 pm | 2pm - 6pm | 2pm - 5pm Sessions | 2pm - 6pm | 2pm - 5pm Sessions | | | | |
| 4:00 pm | Plant Tours | A1 - A6 | Plant Tours | C1 - C6 | | | | |
| 5:00 pm | | | | | | | | |
| 6:00 pm | 5:30pm - Reception | | 5:30pm - Reception | | | | | |
| 7:00 pm | 5:30pm | - кесериоп | 5:30pm - | Kecepuon | | | | |
| 8:00 pm | | | | | | | | |

* Schedule and speakers are subject to change

Exhibit Hall Hours

Monday, March 17th: 5:30 - 7:30 pm

Tuesday, March 18th: 9:00 am - 12:00 pm & 2:00 - 7:30pm

Monday, March 17th: 2pm - 6pm

Tour 1: Rohm & Haas Texas, Inc. Tour 2: Valero Energy Corporation

Tuesday, March 18th: 2pm - 6pm

Tour 3: Valero Energy Corporation

Plant Tours

Wednesday, March 19th: 8am - 2pm

Tour 4: Chevron Phillips and Calpine

Please Note: Plant Tour attendees must comply with all admission requirements set by participating plants. A limited number of seats are available, thus early registration is highly encouraged. Tour Schedule is subject to change without notice.

Any attendee to the Wednesday Plant Tour will incur a \$15 fee to cover the cost of the lunch.

TRACK SESSIONS





Monday • Block A • 2 to 5PM

| Session A1 Texas Challenges & Sustainability Texas' Response for the Future | | Session A3 | Session A4 | Session A5 | Session A6 | |
|--|---|---|--|---|--------------------------------|--|
| | | Emissions Reductions and Combined Heat and Power Implementation | Organizational and Managerial Aspects of Your Plant's Energy-Efficiency Program | ExxonMobil Showcase | Highlights from Plant Tours | |
| Jerry Matthews, Executive Director, Texas Council on Environmental Technology Topics include the status of air emissions research, the State Implementation Plan, the technology verification process, and funding sources. | Dennis Milligan, Global Waste Minimization Leader, Dow Chemical Company What does Sustainability mean and how you get started. Hear what industry leaders are doing to address the issues. | Theodore Bronson, Associate Director, Gas Technology Institute | Paul Scheihing, Assistant Program Manager, DOE Topics include benchmarking, how to organize functional responsibilities for energy management, and how to initiate a program when you don't have a lot of time. | ExxonMobil Topics include results from a process heater retrofit project, use of combined heat and power, and the company-wide Global Energy Management System | Technologies and Practices | |

Tuesday • Block B • 10:20 to 12PM

| Session B1 Session B2 | | Session B3 | Session B4 | Session B5 | Session 6B | |
|--|--|--|---|---|--------------------------------|--|
| Reducing NOx Emissions from Combustion Point Sources | Reductions in VOC Emissions from Flaring Operations: Technologies and Practices | How Can Small Players Survive? | Resources from the Department of Energy | Environmental Management Systems, Pollution Prevention and Energy Efficiency | Highlights from Plant Tours | |
| Doug Deason, Senior Staff Engineer, ExxonMobil Chemical Company Hear from end users and technology developers on the latest in process optimization and new technology performance. | Dennis Griffith, Senior Process Consultant, Granherne Inc. Find out the status of the state's flare VOC emissions research and get an overview of flare technologies that minimize emissions. | Brian Dinsmoor, Plant Manager, BP Chemicals Topics include performance contracting, how to finance improvements and project implementation. | David Salem, Technology Manager, DOE Topics include funding, case studies and analytical tools. | Paul Judice, Texas Commission on Environmental Quality Topics include EMS's, including the new Responsible Care Initiative. Explores using an EMS as a springboard to improved performance. | Technologies and Practices | |

Texas Technology Showcase



Energy-Efficient Process Technologies and Best Practices Chemical and Refining Industries March 17 - 19, 2003 Houston, Texas

Tuesday • Block C • 2 to 5PM

| Session C1 Session C2 | | Session C3 | Session C4 | Session C5 | Session C6 |
|--|--|---|---|---|--------------------------------|
| Reducing NOx Emissions from Combustion Point Sources Reductions in VOC Emissions from Process Vents, Cooling Towers and Fugitive Sources. | | Plant Energy Optimization | Resources from the Department of Energy | Supply Chain Optimization | Highlights from Plant Tours |
| Doug Deason, Senior Staff Engineer, ExxonMobil Chemical Company Hear from end users and technology developers on the latest in process optimization and new technology performance. | | Jeff Hackworth, Energy Manager, Rohm & Haas Texas, Inc. Topics include soft- ware, case studies of use, how to select an optimization program, and costs and benefits: how to convince management to purchase a program. | David Salem, Technology Manager, DOE Topics include funding, case studies and analytical tools. | John Oleson, President, Oleson Consulting Optimization and improvement of supply chain from purchase of raw material to delivery of end product. Case studies and techniques will be presented that save costs equivalent to 5-15% of sales. | Technologies and Practices |

Wednesday • Block D • 8 to IIAM

| Session DI | Session D2 | Session D3 | Session D4 | Session D5 | |
|--|--|---|---|--|--|
| How to Commercialize your Technology | Separations or Distillation Technologies | Alternative Energy Resources, Biomass Programs and Transportation Technologies | Dow Showcase | Innovative Technologies and Practices Related to Pumps, Motors and Compression Equipment | |
| Kathey Ferland, Texas Industries of the Future Topics include developing a commercialization plan, finding funding for pilot and demonstration projects, finding data on the chemical or refining end-users and business development resources. | Bruce Eldridge, Director, University of Texas Separations Research Program Near-term technology developments and operating practices that will reduce energy usage and costs. | Jack Jenkins, DOE Topics include alternate sources of energy, fuels, power and products from biomass resources and automotive and transportation technologies. | Ken Tannenbaum, Global Energy Conservation Leader Topics include Dow's By-Product Synergy Program, the application of the Six Sigma methodology to energy- efficiency projects and NOx reduction projects. | Jeff Kirk, Energy Excellence Leader, Celanese Chemicals | |

Texas Technology 2003 Showcase

REGISTRATION FORM

| First Name | MI | | Last Name | | | Badge First | Name |
|---|--|-------|--|----------------|-----------------|---------------|-----------------------------------|
| Organization | | | | | | | |
| Mailing Address | | | | | | | |
| | | | | | | | |
| City | State | | Zip | | | | |
| Phone | Fax | | | Emai | l Address | | |
| ☐ Check here if you have any sp☐ I desire a vegetarian meal. | _ | - | | | | | |
| Please indicate which Plant Tour you in order of preference (1-3).* | would like to atten | ıd, | | Please indicat | e which ses | sions you pl | lan to attend: |
| Rohm & Haas (2-6 pm) | <u>Tuesday</u> | Wed | nesday | Monday PM | Tuesday AM | Tuesday PM | Wednesday AM |
| Valero (2-6 pm) | _ | | | □ A1 □ A2 | □ B1 □ B2 | □ C1 □ C2 | □ D1 □ D2 |
| Chevron Phillips & Calpine (8 am-2 | | | | □ A2 | □ B2 | □ C2 | □ D3 |
| * Subject to availability. See Plant Tour Schedule for description. | | | | □ A4 □ A5 | □ B4 □ B5 | □ C4 □ C5 | □ D4 □ D5 |
| Subject to availability. See Flain Tour Sch | edule for description. | | | □ A6 | □ B6 | □ C6 | a D3 |
| Please indicate your professional category | □ Chemical Indu□ Consultant□ NGO | ıstry | ☐ Refinery Industrum Academic/University Other | ersity | □ Supp □ Stude | | Technology Develope Government |
| | \$200 | | | <u>Payme</u> | nt Met | hod | |
| ☐ Corporate Registration | \$300 | | Check or Money | Order | | | |
| □ University & Government (non I□ DOE Employees* | \$200 \$50 | | Payable to: OIT | Expo | | | |
| ☐ Lunch for Wednesday Tour | \$30 \$15 | | Fed | ID # 54-18116 | 42 | | |
| Total Due \$ | | | Purchase Order | # • | | | |
| *Note for DOE Employees - Charge covers no non-meal charges included). Per DOE 4.d.8, this charge cannot be expensed as a (per diem allowance will cover). | Order 110.3 Part | _ | Credit Card | VISA MC | C AME | X | |
| Send to: | | Cr | edit Card Number | | | Exp. Da | ite |
| Texas Technology Showcase | | | | | | | |
| 1201 New Jersey Ave., NW | | Na | me on Card | | | Signatur | re |
| Washington, DC 20001 | | | | *Cha | rge will appear | • | Ianagement Services |

Cancellation Policy: All cancellations must be received in writing on company letterhead, and mailed or faxed to the address below. All cancellations postmarked or faxed *on or before February 9*, 2003 will receive a refund minus an administrative charge of \$50. **NO REFUNDS AFTER FEBRUARY 9**, 2003. Registration may be transferred to another individual in writing on company letterhead.